

NEOTROPICAL MYRSINACEAE -- XI

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AMATLANIA Lundell, *Wrightia* 7: 38. 1982

AMATLANIA PECTINATA (Donn. Sm.) Lundell, comb. nov.

*Ardisia pectinata* Donn. Sm., *Bot. Gaz.* 12: 132. 1887. *Amatlania pellucida* var. *pectinata* (Donn. Sm.) Lundell, *Wrightia* 7: 40. 1982.

Guatemala: Dept. Alta Verapaz, H. von Tuerckheim 942 (holotype, US; fragment & photo, LL). Dept. Baja Verapaz, along dirt road 4 miles NE of Purulha, disturbed primary forest, elev. 1500 m., July 17, 1977, Thomas B. Croat 41325 (fragment & xerox, LL; MO), shrub, 3 m., flowers reddish-violet.

The collection by Croat is the first good material of the species aside from the type collection. *A. pectinata* is distinct from *A. pellucida* (Oerst.) Lundell as represented by the type and the Croat collection. It is apparently rare.

AURICULARDISIA Lundell, *Phytologia* 49: 341. 1981

AURICULARDISIA KNAPP II Lundell, sp. nov. -- Arbor parva, 4--5 m. alta, rufo-furfuracea; folia magna, coriacea, longe petiolata, petiolo crasso, marginato, ad 6.5 cm. longo, perad-  
presse furfuraceo; lamina elliptico-oblongata, ad 46 cm. longa, 12.5 cm. lata, apice obtusa, basi subcuneata, integra, subtus reticulata, punctata; inflorescentia axillaris, anguste paniculata, ca. 15 cm. longa, basi ca. 5 cm. lata, rufo-furfuracea, longe pedunculata; flores capitellati; pedicelli crassi, 1--2 mm. longi; sepala 5, ovato-elliptica, 1.8--2.4 mm. longa, acuta, fimbriato-auriculata, furfuracea, nigropunctata; ovarium glabrum; ovula 9.

Panama: Province of San Blas, 23--29 km. from Pan-American Hwy. on El Llano-Carti Road, forest and forest edges along road, tropical wet forest, elev. 300--400 m., Oct. 28, 1981, S. Knapp 1843 (holotype, LL), treelet 4--5 m., inflorescence rachis very dark reddish-brown, fruit maroon and fleshy.

The furfuraceous flowers are in small peduncled heads and nearly sessile, with pedicels nearly as thick as the flowers.

The distinctive sepals, covered and bordered by large scales, have a conspicuous hyaline fimbriate margin on the covered edge. Its thickly coriaceous leaves have rather obscure reticulation on the lower surface.

AURICULARDISIA PLEUROBOTRYA (Donn. Sm.) Lundell var.

PARVA Lundell, var. nov. -- Frutex, 4 m.; ramuli crassiusculi, adpresse furfuracei; folia parva, supra glabra, subtus dense adpresse furfuracea, petiolata, petiolo 3--7 mm. longo, canaliculato; lamina subcoriacea, oblanceolata, 2.5--6 cm. longa, 1.3--1.7 cm. lata, apice acuta vel subacuminata, basi acuminata; inflorescentia longe pedicellata, paniculata, ad 5 cm. longa, adpresse furfuracea; flores subcorymbosi; pedicelli ad 1 cm. longi; sepala 5, ovata, ad 2.2 mm. longa, furfuracea, auriculata, fimbriata, apice acutiuscula, minute aurantiaco-punctata; corolla glabra, punctata; ovarium glabrum.

Panama: Bocas del Toro, Upper Rio Colubre, elev. 2500--3000 m., August 1983, L. D. Gomez, R. Chacon, I. Chacon, Gerardo Herrera 21919 (holotype, LL), shrub 4 m., flowers pale pink, stamens brown, ovary red.

The very small leaves, appressed furfuraceous beneath, small stalked inflorescence of two to several corymbs, flowers with pedicels up to 1 cm. long, and typically asymmetrical sepals with hyaline fimbriate auricle on overlapped edge well-mark this variety. Only flower buds are available.

This taxon, which grows above 2500 meters, appears to be a diminutive form of Auriculardisia pleurobotrya (Donn. Sm.) Lundell, and all parts of the variety are smaller than the species.

IBARRAEA Lundell, *Phytologia* 48: 137. 1981

IBARRAEA WENDTII Lundell, *Wrightia* 7: 46. 1982.

Mexico: Veracruz, Municipio Hidalgotitlan, lado O del Rio Cuevas, un poco al N del Poblado 6, en selva perturbada, elev. 140 m., July 19, 1980, Tom Wendt, A. Villalobos C., & I. Navarrete 2625 (LL), arbolito de 4 m. de alto. Municipio Minatitlan, 21 km. al norte de Uxpanapa, sobre el camino a Ejido Los Liberales y el Poblado 13, orilla del arroyo, elev. 150 m., July 21, 1980, Wendt et al. 2662 (LL), arbolito. Municipio Minatitlan, loma grande, elev. ca. 900 m., al S de Poblado 11, ca. 27 km. al E de La Laguna, Wendt et al. 4023 (LL), arbolito. Municipio Minatitlan, 1 km. al NO de Pob. 13 en el camino a Uxpanapa (Pob. 12), orilla de arroyo pedregoso seco, elev. 130 m., May 16, 1983, Wendt et al. 4087 (LL), arbolito de 4--5 m., petalos y sepalos blancos con puntitos anaranjados concentrados cerca de los apices, petalos con una mancha de amarillo muy palida cerca de la base, flores ligeramente fragantes. Municipio Minatitlan, Cerro Blanco,

ca. 7 km. al NE de Uxpanapa en el camino al Pob. 15, cima del cerro, elev. 450 m., May 29, 1983, Wendt et al. 4167 (LL), arbolito de 3 m., botones blancos.

From the region where the type was collected, all these collections appear to be referable to I. Wendtii. The flexuous weak inflorescence branches suggest I. Tonii Lundell of Chiapas, known only from a fruiting collection. The two taxa may be related, but I. Tonii differs in punctuation, flowers 4- or 5-parted, and leaf form.

PARATHESIS (A.DC.) Hooker f., Bentham & Hooker f.,  
Gen. 2: 645. 1876

PARATHESIS CARTAGOANA Lundell, sp. nov. -- Arbor, 20 m., brunneo-tomentosa; ramuli crassi, tomentosi; folia tomentosa, magna, longe petiolata, petiolo crasso, ad 3.5 cm. longo, canaliculato; lamina coriacea, oblonga vel elliptica, ad 30 cm. longa, 10.5 cm. lata, apice abrupte acuminata, basi acuta, minute denticulata, supra venosa, subglabra, subtus dense tomentosa; inflorescentia terminalis, magna, pyramidalis, tomentosa, paniculata, ad 30 cm. longa; flores corymbosi; pedicelli crassi, tomentelli, ca. 5 mm. longi; sepala coriacea, anguste triangulata, 3 mm. longa, acuminata, extus tomentella; corolla ca. 9 mm. longa, extus tomentella; petala basi connata, lanceolata, ca. 7 mm. longa, lineata, intus villosa, basi glabra; stamina erecta, ca. 5 mm. longa; filamenta crassa, punctata, ca. 2.75 mm. longa; antherae ovato-ellipticae, ca. 3.2 mm. longae, apice apiculatae, dorso nigro-punctatae; ovarium tomentellum; ovula 12.

Costa Rica: Province Cartago, edge of pasture, above Rio Turrialba, 2.5 km. E of Trinidad, alt. 1680 m., June 15, 1969, Roy W. Lent 1739 (holotype, F; fragment & xerox, LL), tree of 20 m., petals lavender, fruit black with brown pubescence.

With the collections available of the two taxa, P. amplifolia Lundell of the lowlands of Panama and P. cartagoana at a higher elevation in Costa Rica, the two taxa are vegetatively difficult to separate. However, the slender small versatile anthers of P. amplifolia borne on slender elongated filaments are altogether different from the large erect ovate-elliptic anthers of P. cartagoana which are borne on thick much shorter filaments. The brownish indument of the two taxa, size of leaves and inflorescences are very similar. P. cartagoana has leaves with denticulate margins and the veins above are strongly impressed. Because of larger flowers in P. cartagoana, differing in important features, two taxa are recognized.

A third older taxon, P. bicolor Lundell, has similar reddish-brown indument and vegetative features, but unfortunately it is known only from fruiting collections. The

fruiting sepal of P. bicolor is broadly triangular, only about 2 mm. long and nearly as wide at base. Flowers are needed to determine the relationship of P. bicolor to P. amplifolia and P. cartagoana.

Only P. cartagoana has denticulate leaves; the margins in the other two are entire, a minor yet diagnostic feature worth noting.

PARATHESIS CINTALAPANA Lundell, sp. nov. -- Arbor, ca. 7 m. alta; ramuli graciles, glabrati; folia parva, petiolata, petiolo ad 1.2 cm. longo; lamina membranacea, glabra, oblanceolata, 5--10 cm. longa, 1.5--3.5 cm. lata, apice subabrupte acuminata, basi acuminata; inflorescentia axillaris, paniculata, 3.5--9 cm. longa, gracilis, glabra; pedicelli graciles, ad 7 mm. longi; sepala triangulata, ca. 1 mm. longa, acuta; petala anguste lanceolato-triangulata, ca. 5.5 mm. longa, apice attenuata, intus villosa; stamina ca. 3 mm. longa; filamenta ca. 1.7 mm. longa; antherae lanceolato-ovatae, acutae, ca. 2.2 mm. longae, nigropunctatae; ovarium glabrum; ovula parva, ca. 7.

Mexico: Chiapas, Municipio of Cintalapa, Montane Rain Forest between Colonia Francisco I. Madero and Colonia A. Lopez Mateos, elev. 1250 m., Dec. 31, 1980, D. E. Breedlove 49040 (holotype, Calif. Acad.; fragment & xerox, LL), tree, 20 feet tall, flowers pink.

The inflorescence appears to be terminal, but the small panicles are in the axils of leaves, the apical ones reduced. The anthers, subequaling the filaments, are erect and dorsally punctate with black glands. The petals are short villous within over entire surface except at base.

PARATHESIS NAVARRETEI Lundell, sp. nov. -- Frutex, 1.5--2 m.; ramuli crassi, glabrati; folia magna, glabra, longe petiolata, petiolo ad 3.5 cm. longo; lamina membranacea, ad 30 cm. longa, 10 cm. lata, subintegra, apice subabrupte acuminata, basi cuneata vel acuminata; inflorescentia axillaris, paniculata, parva, ad 10 cm. longa, pedunculata, puberula; flores corymbosi; pedicelli 2.5--4 mm. longi; sepala anguste lineari-triangulata, ad 1.5 mm. longa, obtusiuscula; petala lineari-lanceolata, ca. 5 mm. longa, aurantiaco-lineata, intus villosa; filamenta glabra, ca. 2 mm. longa; antherae lineari-lanceolatae, ca. 1.5 mm. longae, obtusiusculae, minute paucipunctatae; ovarium glabrum; ovula 7.

Mexico: Veracruz, Municipio Hidalgotitlan, orillas del Rio Las Cuevas, elev. 130 m., March 17, 1982, Tom Wendt, A. Villalobos C. & I. Navarrete 3726 (holotype, LL), hierba de 1.5--2 m. de alto, flores blancas, frutos rojos, dulces.

In leaf size, form and pubescence, P. Navarretei is similar to P. Wendtii Lundell, but the flowers of the two are quite different. In P. Navarretei the petals are much shorter,

about 5 mm. long, the filaments short and glabrous, and the oblongish anthers are obtusish, not cuspidate, with the small black dorsal glands inconspicuous. Both species have flowers similar to *P. Oerstediana* Mez, to which they are related, but the latter has short tomentose indument consisting of reddish branched, matted hairs. The other two species are minutely puberulent to glabrous.

PARATHESIS NEEI Lundell, *Wrightia* 7: 247. 1983.

Tree 4--8 m. high; branchlets thickish, tomentose with reddish stalked stellate and dendroid trichomes; leaves large, petiolate, the petioles thick, marginate, 1.5--2 cm. long, glabrous above, tomentose beneath; leaf blades membranaceous at first, becoming chartaceous to subcoriaceous in fruit, glabrous above, pubescent beneath with stellate trichomes, these dense along midvein and lateral veins, elliptic, 12--30 cm. long, 5--12 cm. wide, apex abruptly acuminate to caudate-acuminate, base subcuneate and decurrent on the marginate petiole, margin inconspicuously crenulate to subentire; inflorescences terminal, paniculate, pyramidal, up to 20 cm. long, 15 cm. wide at base, sometimes smaller, tomentose with reddish stellate trichomes; flowers corymbose, with pedicels 2--3 mm. long; sepals narrowly triangular, 1.5--2 mm. long, acuminate; petals small, linear-lanceolate, 3.5--4 mm. long, the margin and apex villous within, otherwise glabrous; stamens about 2.5 mm. long, with short filaments; anthers elliptic-lanceolate, about 2 mm. long, dorsally punctate with large black gland extending almost to apex; ovary apparently glabrous; fruit (immature) subglobose, red.

Mexico: Veracruz, Municipio Minatitlan, about 1 km. NO of Pob. 15 Nuevo, on the road to Cerro Blanco and Pob. 12, elev. 170 m., May 14, 1983, Tom Wendt, A. Villalobos C., & I. Navarrete 4066 (LL), tree of 4--8 m., petals white, fruits reddish.

This is the first flowering collection of this fine taxon. Additional collections of the species are: M. Nee & G. Schatz 19872 (holotype, F; isotype, Xal), Nee & Schatz 19926 (paratypes, F, Xal), and A. Gomez-Pompa, W. Marquez, J. I. Calzada 5486 (Xal), all collected in the Catemaco region of Veracruz.

PARATHESIS NIGROPUNCTATA Lundell, sp. nov. -- Arbor parva, ad 2 m. alta, ramulis gracilibus, minute tomentellis; folia parva, petiolata, petiolo 4--9 mm. longo; lamina membranacea, minute et dense nigropunctata, anguste oblongo-lanceolata vel oblongo-elliptica, 4.5--10 cm. longa, 1.2--3 cm. lata, integra vel subintegra, apice acuminata, subcaudata, basi anguste cuneata; inflorescentia axillaris, parva, paniculata, pedunculata, minute pubescentia, glabrata, ad 5 cm. longa; flores corymbosi; pedicelli 2.5--5 mm. longi; sepala parva, anguste triangularia, 1--1.2 mm. longa, acuta; petala anguste

lanceolata, ca. 3.5 mm. longa, punctata, intus villosa; stamina ca. 2.4 mm. longa; filamenta ca. 1 mm. longa; antherae lanceolatae, ca. 1.5 mm. longae, epunctatae vel raro minute 1-punctatae; ovarium glabrum; ovula 5.

Mexico: Chiapas, Mun. Jaltenango, al NW de la Reserva del Triunfo, en el Cerro del Filo, alt. 1980 m., bosque de Quercus con Matudaea, Nov. 5, 1982, J. I. Calzada, G. Garcia & G. Juarez 8782 (holotype, LL), arbol, 2 m.

Growing in cold humid mountainous terrain, P. nigropunctata appears to have affinity to P. Breedlovei Lundell, also of Chiapas. It differs in various features, but notably in its leaves densely black punctate mostly with minute linear glands while leaves of P. Breedlovei are pellucid-punctate. The epunctate or rarely and minutely 1-punctate lanceolate anthers and glabrous ovary tapering into a corkscrew style are among the other differences. Both species have small very slender branched inflorescences which appear terminal but are in leafy axillary panicles.

PARATHESIS OAXACANA Lundell, sp. nov. -- Frutex, 1--2 m., ramulis crassiusculis, minute tomentellis, glabratis; folia membranacea, supra glabra, subtus glabrata, petiolata, petiolo 1--1.5 cm. longo, canaliculato; lamina dense pellucido-punctata, oblongo-elliptica, 10--17 cm. longa, 3.5--6 cm. lata, apice acuminata, basi acuminata vel attenuata, integra vel subintegra, subtus venosa; inflorescentia terminalis, minute tomentella, parva, ca. 9 cm. longa, anguste paniculata; flores corymbosi; pedicelli crassiusculi, ad 3 mm. longi; sepala triangulata, ca. 1 mm. longa, acuminata; petala lineari-lanceolata, ca. 5 mm. longa, attenuata, margine intus villosa; stamina erecta, ca. 2.7 mm. longa; filamenta crassa, ca. 1 mm. longa; antherae lanceolatae, ca. 2 mm. longae, dorso glandulosae; ovarium glabrum; ovula 6, parva.

Mexico: Oaxaca, Municipio Maria Chimalapa, 10 km. al SE de Las Juntas (union de Rios Cargamonedá y Gigante) en camino a Chicomazatlan y Cienega de Leon, Chiapas, muy cerca de la línea con Chiapas; sierra con bosque seco de pino, alt. 1000 m., May 26, 1983, T. Wendt, A. Villalobos, I. Navarrete 4147 (holotype, LL), arbusto 1--2 m.; pétalos rosados, estambres amarillos.

P. oaxacana has the inflorescence type, short pedicels, small calyx and anthers punctate with large thick gland covering much of the dorsal surface, features typical of P. parvissima Lundell. This type of anther gland is present in several species and probably indicates an affinity of these taxa.

P. parvissima Lundell, described from Chiapas, appears to be closely related, differing in leaf form, petals about half as long, and with post anthesis elongation of rachis of corymbs to form racemes.

A collection from Veracruz, T. Wendt et al. 4086 (LL), from Municipio Minatitlan, 1 km. al NO de Poblado 13 en el Camino a Uxpanapa, elev. 130 m., May 18, 1983 has an almost identical inflorescence, similar indument, and flowers almost identical to those of *P. oaxacana*, but the leaves are much smaller, and only a single flower is available. The identification as *P. oaxacana* is tentative.

The Veracruz collection was made at a much lower altitude.

PARATHESIS PARVISSIMA Lundell, sp. nov. -- Frutex, 2 m.; ramuli crassiusculi, minute tomentelli; folia longissima, subchartacea, anguste oblanceolata, 10--23 cm. longa, 2.3--4 cm. lata, apice acuminata, basi attenuata, acuminata, integra vel subintegra, pellucido-punctata; inflorescentia terminalis, minute tomentella, anguste paniculata, 10--12 cm. longa, ad 4 cm. lata; flores parvissimi, corymbosi; pedicelli 2--4 mm. longi; sepala anguste lanceolata, ad 1 mm. longa, acuminata; petala anguste lanceolata, ca. 2.5 mm. longa, intus villosa; stamina ca. 2 mm. longa; antherae erectae, lanceolatae, ca. 1.5 mm. longae, punctatae; ovarium glabrum; ovula 3 vel 4, parva.

Mexico: Chiapas, Mun. Ocosingo, Lower Montane Rain Forest 70 km. southwest of Palenque on road to Ocosingo along the Jol Uk'um, elevation 550 m., Dec. 4, 1980, D. E. Breedlove & F. Almeda 48262 (holotype, Calif. Acad.; fragment & xerox, LL), shrub 6 feet tall.

The very slender leaves, finely veined and pellucid-punctate, the narrow terminal inflorescences, short pedicels, and minute flowers are features of note in *P. parvissima*. The glands of the anthers are wide and nearly as long as the anthers. The slender straight style exceeds the petals. At anthesis the flowers are corymbose but post anthesis the rachis elongates so that the fruits are in racemes. The petals are villous within only along the margins.

Another collection, Breedlove 28738 from an elevation of 1250 m. in Mun. Bochil, 7 km. northeast of Bochil along road to Simojovel, represents a variety of *P. parvissima* with smaller crenulate leaves and smaller inflorescences but with typical flowers.

*P. oaxacana* Lundell is of this complex.

PARATHESIS RUBRIFLORA Lundell, sp. nov. -- Frutex, 3 m.; ramuli crassiusculi, glabrati; folia glabra, petiolata, petiolo 1--1.5 cm. longo, canaliculato; lamina membranacea, lanceolata, 10--20 cm. longa, 3.5--6.5 cm. lata, apice acuminata, basi subcuneata, acuminata, crenato-dentata; inflorescentia terminalis, paniculata, 8--13 cm. longa, minute tomentella; flores corymbosi; pedicelli 3.5--5 mm. longi; sepala parva, anguste lanceolata, ca. 1 mm. longa, acuminata; corolla ca. 4.5 mm. longa; petala lanceolata, basi connata,

margine et apice minute villosa, basi glabra; stamina ca. 2.5 mm. longa; filamenta crassa, ca. 1 mm. longa; antherae lanceolatae, ca. 2 mm. longae, apiculatae, dorso nigropunctatae; ovarium glabrum, vel parce puberulum; ovula 4 vel 5.

Mexico: Chiapas, edge of tropical evergreen forest, km. 17 NW of Ocozocoantla on the road to Mal Paso, alt. ca. 775 m., Aug. 4, 1965, Keith Roe, Eunice Roe, & Scott Mori 883 (holotype, WIS; isotype, Dudley Herb; fragment & xerox, LL), shrub 3 m. high, flowers red.

The branchlets are essentially glabrous for the indument is scarcely visible. In leaf form the species resembles P. prionophylla Standl. of Nayarit. The leaf margin is crenate-dentate with large mostly irregular rounded teeth. The ovary appears to have a few hairs apically.

P. rubriflora is closely related to P. lanceolata Brandeg., having similar anthers and inflorescence.

PARATHESIS VIOLACEA Lundell, sp. nov. -- Frutex, 3 m.; ramuli crassiusculi, minute tomentelli; folia anguste petiolata, petiolo ad 2 cm. longo, canaliculato; lamina membranacea, dense punctata, lanceolata, 15--20 cm. longa, ad 6 cm. lata, apice subabrupte acuminata, basi acuta, supra glabra, subtus glabrata; inflorescentia lateralis, longe pedunculata, paniculata, ad 20 cm. longa, minute peradpresse tomentella, glabrata; flores corymbosi; pedicelli 5--7 mm. longi; sepala parva, punctata, lanceolata, ad 1 mm. longa, acuta; corolla ca. 5 mm. longa; petala basi connata, lanceolata, intus minute villosa, basi glabra; stamina ca. 2.5 mm. longa; filamenta crassiuscula, ca. 1 mm. longa; antherae ovatae vel lanceolatae, ca. 2 mm. longae, dorso minute nigropunctatae, raro epunctatae; ovarium apice stellatum; ovula parva, 6, 7.

Mexico: Chiapas, along road between Motozintla de Mendoza and Siltepec, 25.8 miles N of Motozintla, 9 miles south of Siltepec, primary cloud forest, 1300 m., Feb. 12, 1979, Thomas B. Croat 47392 (holotype, LL), shrub, 3 m., flowers reddish-violet, fruits red to purple.

The indument is sparse and consists of minute stellate hairs mostly appressed and inconspicuous. The lower surface of leaves becomes glabrous early. The leaf margin is essentially entire. Pubescence of apex of ovary and basal two-thirds of style consists of minute stellate hairs.

Referable to Section II, Series 16--23 of my monograph, P. violacea appears to have affinity to P. aurantiaca Lundell of El Salvador, which has orange glands in all parts. P. violacea differs in this particularly and in other features of the flowers and vegetative parts.